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### Abstract

This catalogue of research conducted during 1979 is produced in accordance with the Operating Handbook for the Australian Army Psychology Corps 2D-3. It consists of all projects which were undertaken within the Corps which progressed to a stage where they were identifiable by a title. The catalogue summarises the returns of research submitted by all AA Psych Corps Units/Appointments.

Those projects which have been completed and resulted in the production of a report have been distributed on a scale determined by DPSYCH-A. Some reports were commissioned for/by a particular Unit or Appointment and distribution has been limited. Requests for limited distribution reports should be directed to DPYSC-A.

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1. BONEGILLA DEVELOPMENT PROJECT: ATTITUDES AND OPINIONS OF MILITARY PERSONNEL AND THEIR FAMILIES ABOUT ASPECTS OF LIFE IN ALBURY-WODONGA. (Research Note 1/79) February 1979. 1 Psych Research Unit. (Limited Distribution)

MAJ S. A. MARTYN

This Research Note is one of a series dealing with aspects of the Bonegilla Development Project (BDP) which involves the relocation of Army training schools to the Albury-Wodonga area. The current research involved an investigation of attitudes and opinions of military personnel and military families currently living in Albury-Wodonga.

Attitudes and opinions were elicited through postal questionnaires. Topics examined were personal particulars, accommodation, employment for wives, health and family care, education, shopping, leisure and entertainment, transport and general aspects of life in Albury-Wodonga, focussing on problems experienced upon arrival in the area. Results indicated that most aspects of life in the location were regarded favourably by respondents. Negative attitudes were examined as far as the data allowed and reasons for these attitudes discussed. Tentative conclusions were drawn where possible and suggestions were made for improvements to assist military personnel moving into the area in future.

2. SUMMARY OF RECRUIT STATISTICS FROM 1RTB FOR 1977 AND 1978. (Research Note 2/79). January 1979. 1 Psych Research Unit. (Limited Distribution).

MAJ J. W. KELLEY

This Research Note summarized various statistics gathered by 17 Psych Unit on recruits at 1RTB for 1977 and 1978. It looked at comparisons across Military Districts, age and SG ratings, and reasons indicated in reply to the questions concerning how the recruits heard about the Army as an occupation and why they joined the Army. Also within these comparisons a breakup by length of engagement was conducted.

The study showed that, when considering the number of persons available in a MD, more recruits came from 1MD, 5MD, and 6MD; that 74 percent of recruits were 20 years of age or less; that the younger recruits tended to enlist for a three year engagement period; that the number in each SG category decreased in successively lower SG categories; that friends and relations had most influence on potential recruits and that "career" and "security" were the foremost motivations for enlistment.

It was noted that seven to eight percent of recruits were discharged (about half by Review Board) but further analysis of discharged recruits was left to a later study.

Other data were discussed and compared.

3. AN EXAMINATION OF WORK ATTITUDES AT ARMY HEALTH RECORDS OFFICE. (Research Note 3/79). March 1979. 1 Psych Research Unit. (Limited Distribution)

LTCOL D. J. ARMSTRONG

An examination was made of attitudes towards their work of civilian and Army personnel working at Army Health Records Office. A questionnaire

derived from the Salas Satisfaction Questionnaire and its subsequent versions (Salas 1967, 1974) was administered. In the current Research Note, examination was made only of responses to each questionnaire item, primarily to provide feedback to management and staff at AHRO, but also to provide an indication for other units of the value of the Salas Questionnaire items in providing management information.

4. AN EXAMINATION OF TEST RESULTS OF 2/78, 1/79 AND 2/79 RECRUITING TOURS IN PAPUA NEW GUINEA. (Research Note 4/79). December 1979. 1 Psych Research Unit. (Limited Distribution).

CAPT T. C. RAMSDEN

The results of testing of applicants from three recruiting tours in Papua New Guinea were subjected to a series of statistical analyses in order to derive new norms and to assess differences in performance between groups from provinces visited. Five tests were analysed; Pacific Comprehension Test, Numerical Ability Test, Parts 1 and 2, Speed and Accuracy Test, Pacific Word Knowledge Test and Pacific Reasoning Series Test, Form A. The testee groups were derived from fourteen provinces of Papua New Guinea. Analysis revealed that some provincial groups performed consistently better on tests than other groups. Effects of such factors such as education on test performance were noted and the possible effects of other factors such as time of year at which tested were also discussed. New norms were derived and these were compared to the previous PNGDF norms. Implementation of the new norms was recommended.

5. PROJECT M - AN EXAMINATION OF THE EFFECTS OF VARIATION OF ENLISTMENT STANDARDS UPON THE NUMBERS ENLISTED AND UPON SUBSEQUENT SERVICE OF ENLISTEES. (Research Note 5/79). June 1979. 1 Psych Research Unit. (Limited Distribution).

LTCOL D. J. ARMSTRONG

An examination was made of the enlistment rate and subsequent service of recruit applicants classified according to actual psychological processing categories for a period when standards were varied to permit the enlistment of individuals who would normally not be enlisted.

The results showed that under these circumstances there was a variable rate of enlistment, with members normally classified as Intellectual and Personality rejects showing a significantly lower rate of enlistment, and applicants in the Marginally Suitable and Suitable Categories showing a significantly higher rate of enlistment.

Applicants and enlistees were also examined against a number of indices of success (completion of three years service, length of service, reason for discharge for those discharged and rate of promotion for those who served beyond three years). For each index there were significant differences between some psychological processing categories. In general terms the Suitable applicants tended to have higher success rates on each criterion whilst the applicants normally rejected (particularly the Intellectual and Personality rejects) tended to be markedly less successful on each criterion.

Such results give some support for the continued use of current psychological selection standards. However, the lack of success of some applicants

classified as suitable, and more particularly the success of some applicants who would normally have been rejected on psychological grounds suggests that selection procedures can be further refined.

6. PROJECT M - AN EXAMINATION OF THE EFFICIENCY OF PSYCHOLOGICAL DATA IN PREDICTING THE COMPLETION OF THREE YEARS SERVICE. (Research Note 6/79). July 1979. 1 Psych Research Unit. (Limited Distribution).

LTCOL D. J. ARMSTRONG

Project M presented an opportunity to examine the success of selection standards usually imposed. During the early stages of Project M, recruits who would normally be rejected for enlistment were enlisted. The success of the enlistment decision was thus open to examination.

Using the completion of three years of service as a criterion of success the current report demonstrated that the imposition of selection standards (based on the overall psychological recommendation) was successful in reducing the failure rate that occurred in the No Selection situation. This improvement in pass rate was achieved at a cost of the rejection of a substantial proportion of individuals who, under Project M conditions, were able to complete three years service.

The report also demonstrated that the use of an Accept/Reject criterion based on performance on each of a number of tests was perhaps at least as efficient as the usual psychological selection standard in that the test based criteria were able to correctly classify a similar proportion of cases and produced a similar pass rate amongst those cases accepted. On the other hand the test based selection tended to have a lower proportion of incorrect rejections and had a net output of more enlistees who completed three years of service.

It was suggested that the predictive efficiency could possibly be improved by the combination of results on several tests and/or other objective variables.

The results were briefly discussed and directions of future research outlined.

7. PROJECT M - AN EXAMINATION OF THE EFFICIENCY OF PSYCHOLOGICAL DATA IN PREDICTING VARIOUS CRITERIA OF MILITARY SUCCESS. (Research Note 7/79). August 1979. 1 Psych Research Unit. (Limited Distribution)

LTCOL D. J. ARMSTRONG

For individuals enlisted during the Project M period, the most efficient test-based selection levels for predicting the completion of three years service were examined to compare their efficiency in predicting completion of one year, service beyond three years, type of discharge and promotion, with the predictive efficiency of the no selection situation and the psychological recommendation made at the time of recruit processing.

In all cases, the psychological processing recommendation was able to reduce the failure rate encountered in the no selection situation. The cost of this improvement in pass rate was most evidenced in the rejection of individuals who met the various criteria of success under the Project M conditions when certain selection standards were removed.

Single test-based selection levels rivalled the overall psychological processing recommendation in most aspects. the test-based selection tended to

have slightly higher failure rates amongst individuals selected, but tended to have lower rates of incorrect rejection, resulting in a greater net output.

Survival for one year tended to be the criterion most accurately predicted by the psychological variables examined: promotion tended to be the least accurately predicted.

8. SOME CORRELATES OF SUCCESS AND SOME DIFFERENCES BETWEEN THOSE RECRUITS ALLOCATED AT 1RTB AND THOSE RECRUITS DISCHARGED FROM 1RTB ACROSS SOME TESTS AND BIOGRAPHICAL VARIABLES. (Research Note 8/79). June 1979. 1 Psych Research Unit. (Limited Distribution)

MAJ J. W. KELLEY

Differences on test/biographical variables between those recruits allocated from 1RTB and those recruits discharged from 1RTB were investigated. There were statistically significant differences between the groups in such variables as highest class completed, Tests RO3, ASA, AGC and in psychologists' ratings at recruiting centres. The magnitude of those differences was not large enough to be of use in present selection practices.

Discriminant analysis was used to determine further, if any variables were useful in the classification of groups. Although variables such as "highest class completed" and "Army Speed and Accuracy Test" were the most important variables, the discrimination was poor and could only correctly classify, at best, 72 percent of personnel into an "allocated" or "discharged" group.

Correlations and Multiple Regression examined the predictive ability of the test/biographical variables to two measures of success at 1 RTB - "training report" and "allocated or discharged". Relationships were poor (up to 0.28) with the variable "highest class completed" being the most effective predictor.

The problems and assumptions involved in such analyses were discussed.

9. RECRUIT ABSENCE WITHOUT LEAVE FROM 1RTB: ANALYSIS OF BIOGRAPHICAL INFORMATION. (Research Note 9/79) September 1979. 1 Psych Research Unit. (Limited Distribution).

CAPT J. R. M. TONKIN

This study investigated absence without leave among recruits in basic training at 1RTB. AWOL offenders over a twelve month period were divided into two groups (returned and non-returned) and compared on a range of 46 biographical and psychometric variables in order to elicit information on factors influencing AWOL behaviour. A control group was selected by sampling non-offenders.

Results indicated that AWOL recruits differed significantly on seven variables. They were found to be less well qualified in previous employment skills, more likely to have experienced conflict with employers and were more mobile in personal lifestyle. Level of education was lower as were scores on the AGC and ASA. It was also found that psychologists were more negative in their comments on recruits who became AWOL offenders.

The application of these findings is discussed in relation to assisting initial selection decisions.

10. BONEGILLA DEVELOPMENT PROJECT: A SOCIOLOGICAL IMPACT STUDY PREPARED BY THE DEPT OF DEFENCE (ARMY OFFICE) AND THE ALBURY-WODONGA DEVELOPMENT CORPORATION. SUMMARY AND CONCLUSIONS. (Research Note 10/79). September 1979. 1 Psych Research Unit. (Open Distribution).

MAJ S. A. MARTYN, CAPT B. BRADY, MS S. KNOX

This report is the final in the series dealing with the Bonegilla Development Project. This Project involves relocation of the Army Apprentices School and the Female Recruit Training School to Bonegilla in the Albury-Wodonga area. A working party was established to investigate the sociological impact on the Albury-Wodonga area of the relocation and to identify programmes which could be undertaken by the Department of Defence and the Albury-Wodonga Development Corporation (AWDC) to alleviate difficulties of those staff and students moving into the area.

A series of investigations has been completed by both Defence and AWDC and the present report contains a summary of each individual study and additional information of relevance not necessarily elicited in these enquiries. It presents conclusions and recommendations under a series of headings representing the areas of need elicited in the working party's investigation.

11. ASSESSMENT OF ABORIGINAL PEOPLE FOR MILITARY SERVICE IN THE ARES. (Research Note 11/79). November 1979. 1 Psych Research Unit. (Limited Distribution)

MAJ J. W. KELLEY

This Research Note discusses the assessment of Aboriginal applicants for the ARES. The comments are based on a small sample of 22 tested in the northern areas of TMD.

The tests administered were Test R01, Test R03, Test SDI, Test ASA, and the Queensland Test. Comparisons were made among the tests.

The recommendation was made that test score standards be altered until a valid measure of the potential of the Aborigine to function in a military situation can be obtained.

12. ANALYSIS OF CMF (MILLAR COMMITTEE) QUESTIONNAIRE. (Research Note 12/79) 1 Psych Research Unit.

CAPT J. R. M. TONKIN

Report in Preparation.

13. PROJECT M - AN EXAMINATION OF THE EFFICIENCY OF BIOGRAPHICAL DATA IN PREDICTING THE COMPLETION OF THREE YEARS OF SERVICE. (Research Note 13/79). 1 Psych Research Unit. November 1979. (Limited Distribution).

LTCOL D. J. ARMSTRONG

Earlier research had found the single psychological measures applied at time of recruitment had varying degrees of success in accounting for the completion of three years of service for those applicants actually enlisted during the first phase of PROJECT M. It was suggested in that report that other personal or biographic variables might bear a relationship to the completion of three years of service.



This report aims to compare on a large number of personal and biographic variables recorded at the time of recruitment those enlistees who completed three years of service with those enlistees who did not complete three years of service. (Report in preparation).

14. ARRIVING AT THE PROJECT M RECOMMENDATIONS. (Research Note 14/79).  
1 Psych Research Unit. December 1979. (Limited Distribution).

LTCOL D. J. ARMSTRONG

This report outlines the procedures followed and results obtained from PROJECT M. Recommendations for changes to selection procedures are made. (Report in preparation)

15. COSTING THE SELECTION AND TRAINING OF MGE APPLICANTS FOR THE AUSTRALIAN REGULAR ARMY. (Research Note 15/79). 17 Psych Unit.

CAPT J. R. M. TONKIN

Report in preparation

16. CATALOGUE OF AUSTRALIAN ARMY PSYCHOLOGY CORPS RESEARCH PROJECTS - 1978. (Technical Note 1/79). 1 Psych Research Unit. February 1979. (Open Distribution).

WO2 T. A. THURBON

This catalogue of research conducted during 1978 is produced in accordance with the Operating Handbook for the AA Psych Corps 2D-3. It consists of all projects which were undertaken within the Corps and which progressed to a stage where they were identifiable by a title. The catalogue summarises the returns of research submitted by all AA Psych Corps Units/Appointments.

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17. ARMY SELECTION - THE STATE OF THE ART. (Technical Note 2/79).  
1 Psych Research Unit. March 1979. (Limited Distribution)

CAPT T. C. RAMSDEN

The two main elements of the AA Psych Corps selection procedures, testing and interviewing, are employed on the assumption of their being valid and reliable aids in the decision making process. These assumptions are examined in the light of current knowledge about the strengths and weaknesses of each. Research to date makes it apparent that any assumption of reliability or validity needs to be subjected to concrete and careful research.

18. JOB SATISFACTION. (Technical Note 3/79). 1 Psych Research Unit.  
March 1979. (Open Distribution).

CAPT T. C. RAMSDEN.

Despite the amount of literature on job satisfaction and job performance over the last thirty years, both concepts are still vaguely defined.

The dominant theory of job satisfaction until the mid 1960's was Herzberg's two factor theory. The strengths and inadequacies of this theory (and alternatives) with supporting appropriate research evidence are discussed. Variables which have been assumed or found to be related to job satisfaction include pay, position within a hierarchy, social and economic background and job enrichment. The research indicates that the relationship of Job satisfaction to other variables is generally neither direct nor simple and is still ill-understood. Job satisfaction and job performance are also found to be neither directly nor simply related. Other factors, such as expectations, pay and knowledge of results intercede to complicate whatever relationship may exist. Research evidence and explanatory models of the job satisfaction/job performance relationship are discussed. Basically, the state of understanding of the nature of the job satisfaction phenomenon and its correlates is poor.

19. THE USE OF BIODATA IN THE PREDICTION OF ATTRITION DURING THE INITIAL YEAR OF SERVICE IN THE AUSTRALIAN REGULAR ARMY. (Research Report 1/79)  
Det 11 Psych Unit. October 1979. (Limited Distribution)

CAPT L. W. TOMLINSON .

The present study examines the utility of biodata in the prediction of attrition prior to the completion of the initial year of service in the Australian Regular Army. Five hundred and seven soldiers were identified as having been discharged prior to completing the initial year of service during the period 1 July 1977 to 31 December 1978. These were divided into three groups: those who were discharged prior to the completion of recruit training, those who were discharged after having completed recruit training but prior to the completion of initial employment training, and those who were discharged after having completed initial employment training but prior to the completion of the initial year of service. A random sample of 150 soldiers who had completed the initial year of service was used as a comparison group.

Certain of the biodata, collected during the initial selection interview for Army applicants, were analysed using a oneway analysis of variance. The results indicated that the variables in the study accounted for little of the variance. However, level of education was found to be the best predictor of group membership, supporting other recent studies in the United States and Canada.

The importance of the variables collectively was assessed using several discriminant analyses. The results of the initial discriminant analysis suggested that the three discharge groups could be sufficiently homogeneous to be treated as a single entity. A second discriminant analysis, among the three discharge groups, supported this. The final discriminant analysis compared those who had been discharged (as a single group) with the comparison group. The results indicate that even though there was a highly significant discriminant function it was relatively unimportant.

Even so, using the weighted variables in the discriminant function, 64.84% of the population was classified correctly using no adjustment for different group size and 77.17% was classified correctly when adjustment was made for different group size. Reasons for the differences were discussed and suggestions made for a procedure to test whether there were no real differences at all. It was suggested also that further research is warranted following the encouraging results of the present study using only a limited number of biodata. Suggestions were made also in which directions the research could be directed and the introduction of a biographical questionnaire into the selection procedure was discussed.